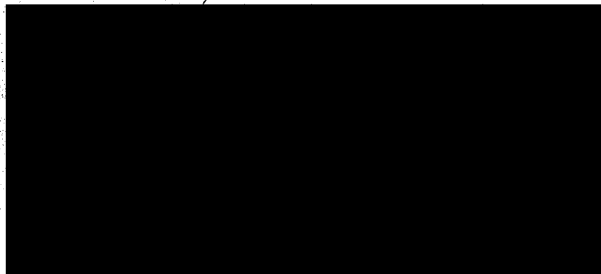


Approved For Release 1999/09/10 : CIA-RDP83-00423R001601180005-9

Switzerland

25X1A2g

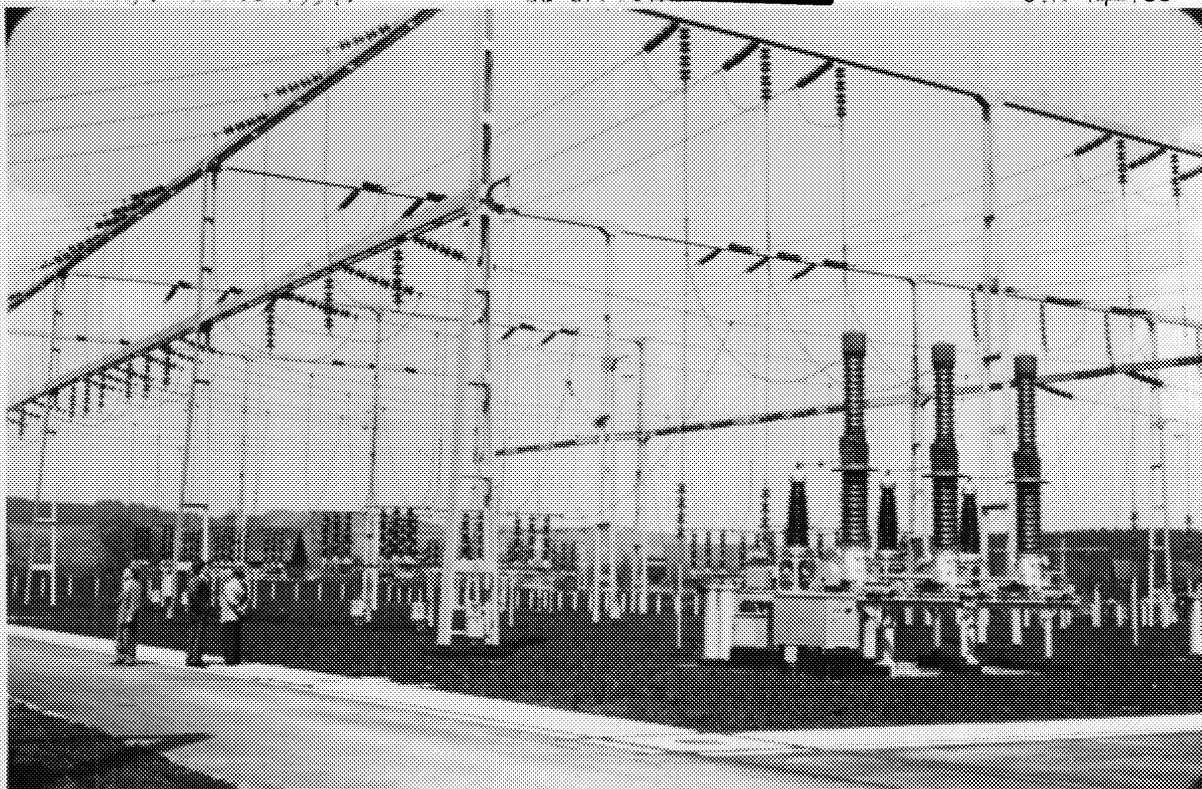
25X1A2g



*Original
copy*

Approved For Release 1999/09/10 : CIA-RDP83-00423R001601180005-9

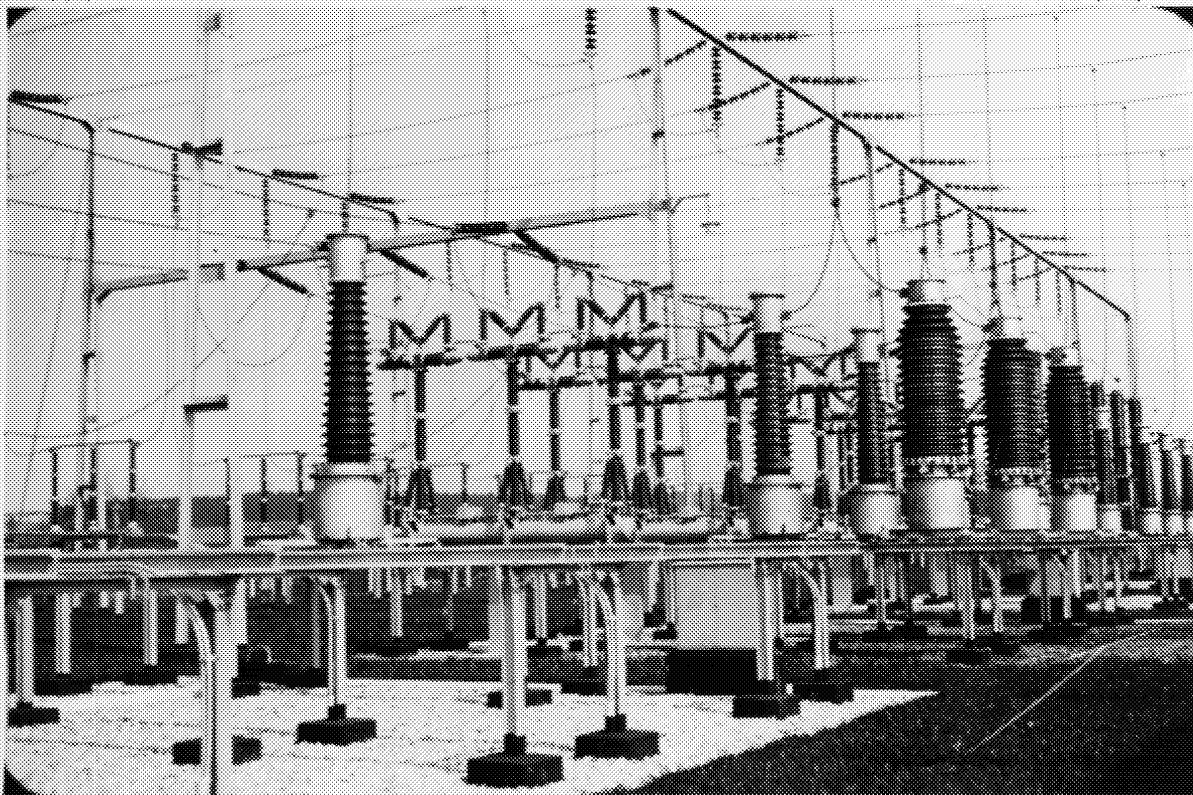
SWITZERLAND LUZERN LUZERN (NR) 47 05 N 08 16 E
METTLER SUBSTATION, 161 KV BANK CIRCUIT BREAKER (OERLIKON LOW OIL CONTENT
DESIGN). APRIL 1954. XXXXXXXXXXXX CIA 142188



Mettlen Substation near Lucerne, Switzerland.
161 kv bank circuit breaker. Breaker is
Oerlikon low oil content design.
161 kv cable termination is small brown
bushings behind circuit breaker and on
same structure with it.

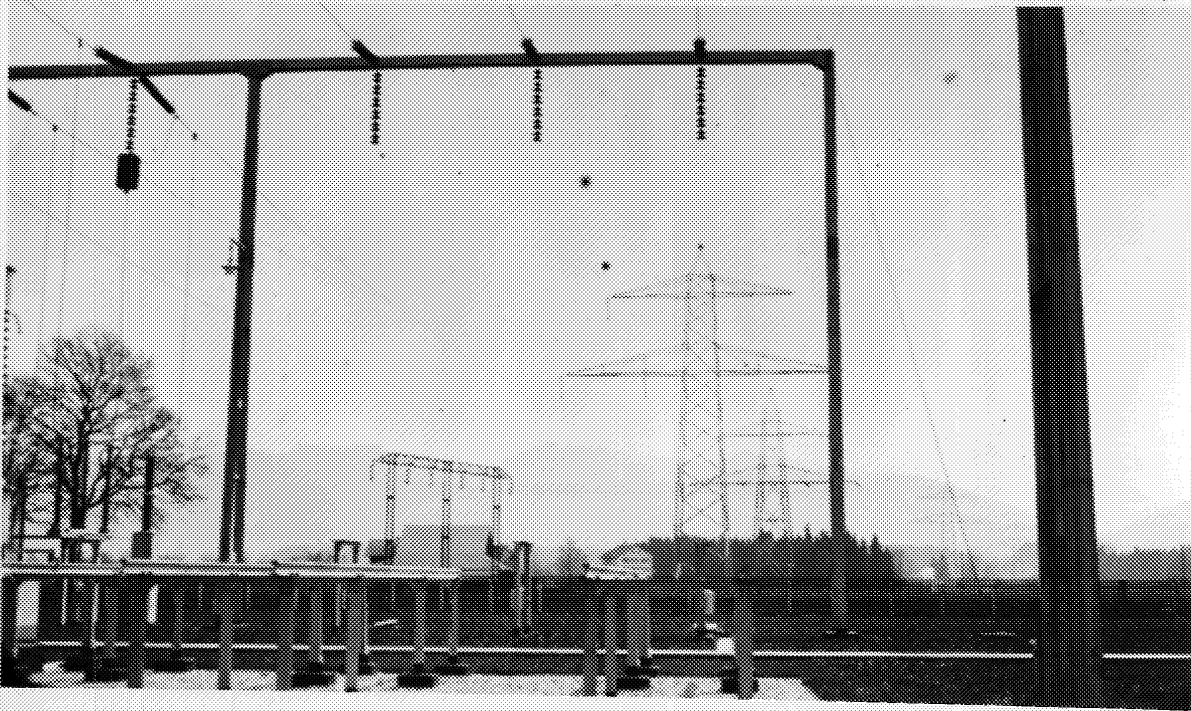
XXXXXXXXXXXX
25X1X6

SWITZERLAND LUZERN LUZERN (NR) 47 05 N 08 16 E
METTLER SUBSTATION. 220 kv SWITCHGEAR. BROWN-BOVERI AIRBLAST CIRCUIT
BREAKER, CENTER. OERLIKON, LOW OIL CONTENT CIRCUIT BREAKER, RIGHT. APRIL
1954. CIA 142190



Mettlen Substation near Lucerne, Switzerland
220 kv switchgear - current and potential
transformers.
Brown-Boveri airblast circuit breaker (with
"M" on top) in center
Oerlikon - low oil content circuit breaker
(with red paint top and middle) at right.
25X1X6

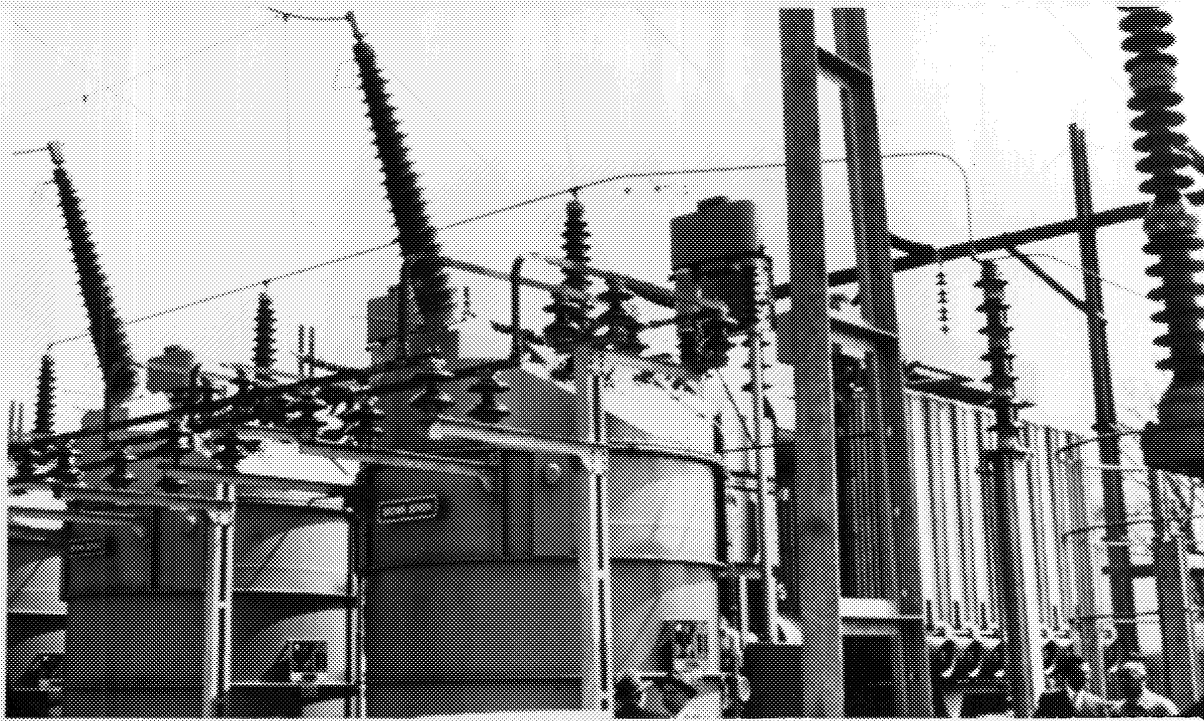
SWITZERLAND LUZERN LUZERN (NR) 47 05 N 08 16 E
METTLER SUBSTATION. 230 KV DOUBLE CIRCUIT CONSTRUCTION, FUTURE 380 KV.
APRIL 1954. CIA 142189



Mettlen Substation near Lucerne, Switzerland.
230 kv double circuit construction, future
380 kv.
Note absence of deadend on line. Back of
substation structure is guyed to take load.

25X1X6

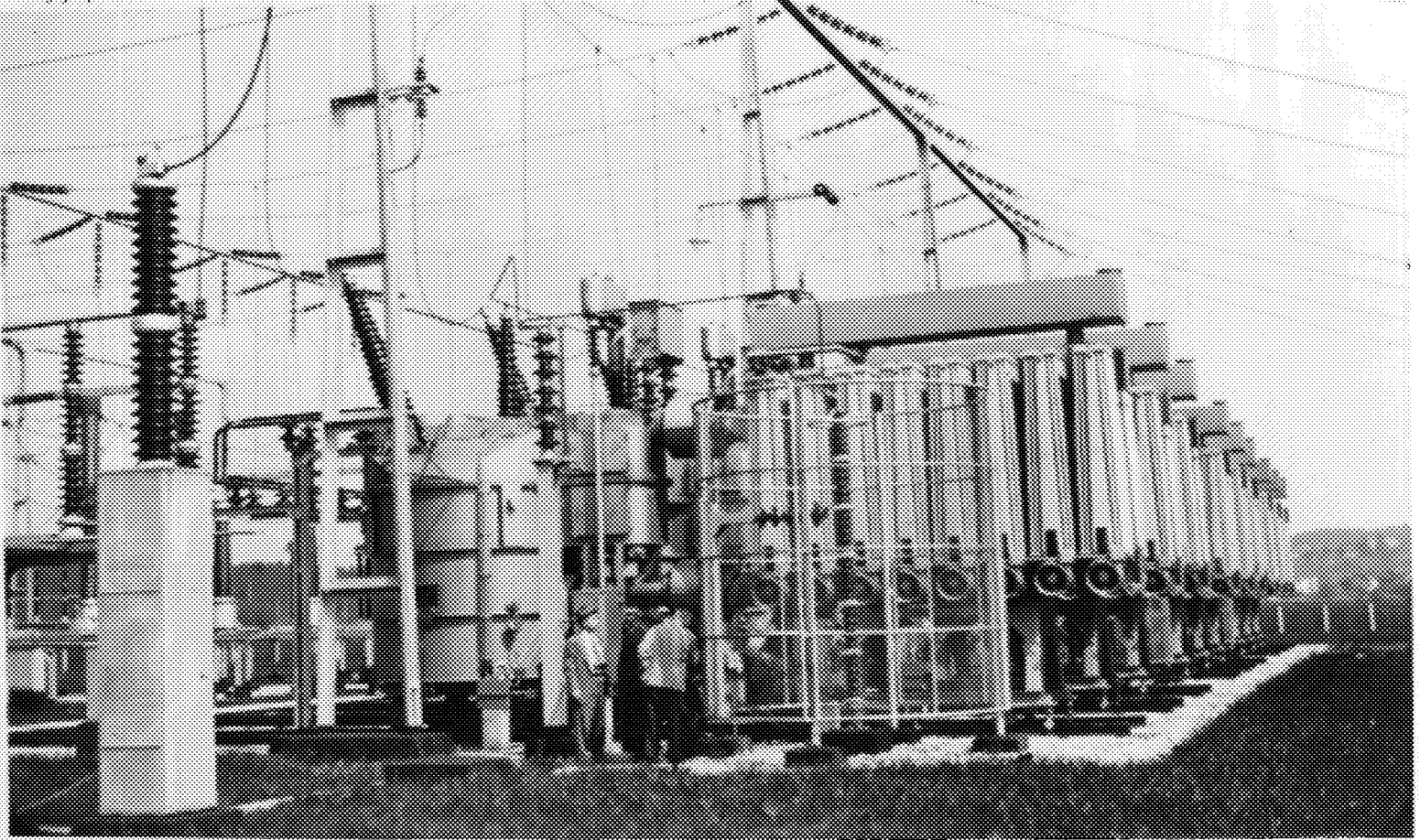
SWITZERLAND LUZERN LUZERN (NR) 47 05 N 08 16 E
METTLER SUBSTATION. HIGH VOLTAGE SIDE OF 100,000 KV BANK. BROWN-BOVERI
UNITS. APRIL 1954. [REDACTED] CIA 142191



Mettlen Substation near Lucerne, Switzerland.
High-voltage side of 100,000 kv bank (3
single-phase units).
230Y-171Y-27.56 delta kv, Brown-Boveri units.
Note radiators banked separate from trans-
former case. [REDACTED]

25X1X6

SWITZERLAND LUZERN LUZERN (NR) 47 05 N 08 16 E
METTLER SUBSTATION. 100,000 KVA BANKS. BROWN-BOVERI TRANSFORMERS. APRIL
1954. [REDACTED] CIA 142192

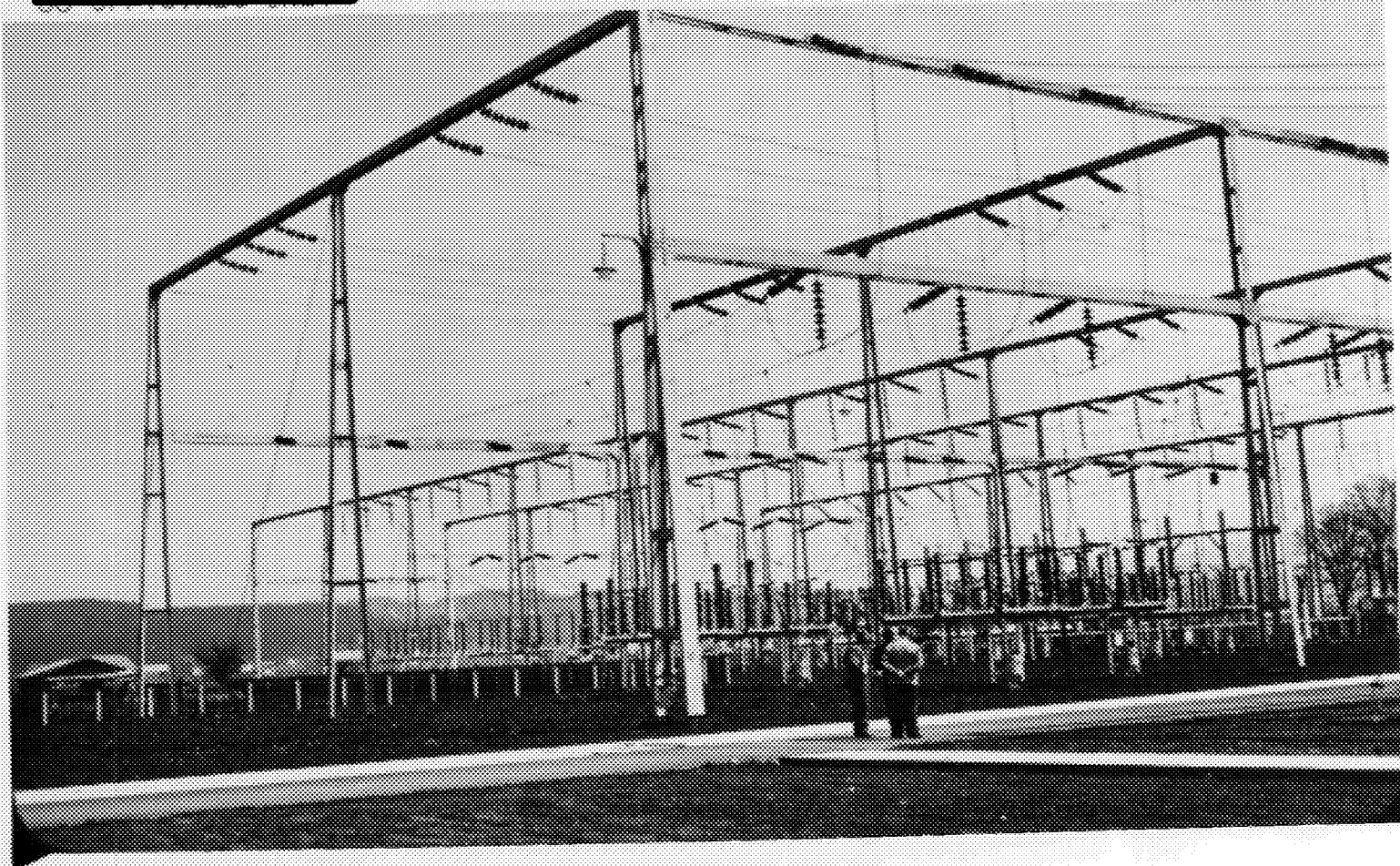


Mettlen Substation near Lucerne, Switzerland
Three 100,000 kva banks, 230Y-171Y-27.56
delta (9 single-phase units)
171 kv connection is cable termination in
transformer.
High-voltage bushing is 380 kv as banks can
be reconnected for this voltage. Tap
changing under load in 171 kv winding.
Brown-Boveri transformers. Note radiators
banked separate from transformer case.

25X1X6 [REDACTED]

SWITZERLAND LUZERN LUZERN (NR) 47 05 N 08 16 E
METTLER SUBSTATION. 161/230 KV YARD. APRIL 1954.

CIA 142193



Mettlen Substation near Lucerne, Switzerland.
161/230 kv yard. Note guys on structure to
carry line tension from opposite side.

25X1X6

SWITZERLAND VALAIS ST. MAURICE (NR) 46 13 N 07 00 E
LAVEY HYDROELECTRIC POWER PLANT. SECTION OF SWITCHYARD. APRIL 1954.

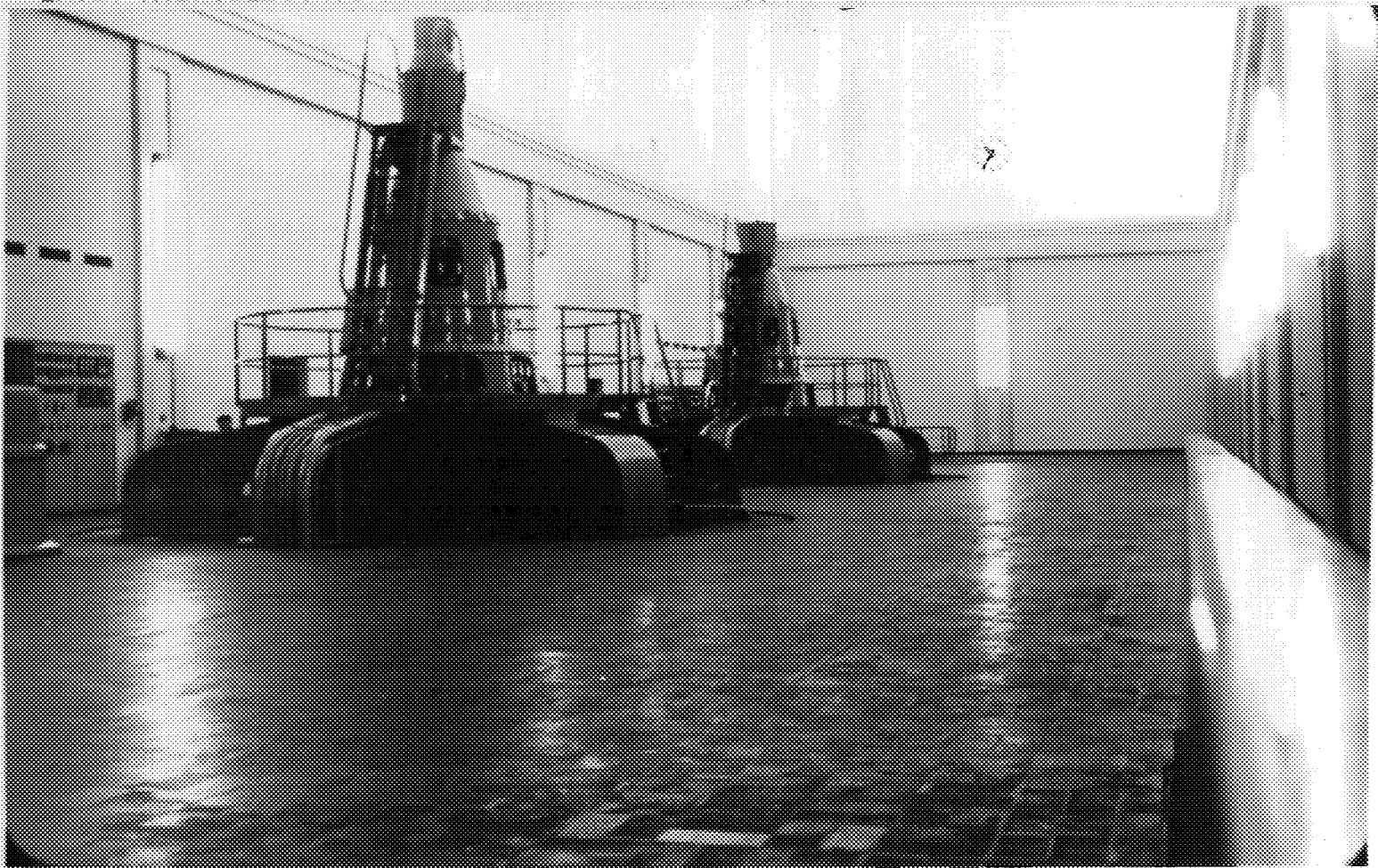
CIA 142194



Lavey Hydro Plant near St. Maurice,
Switzerland, on Rhone River
City of Lausanne System
Part of Switchyard. [REDACTED]

25X1X6

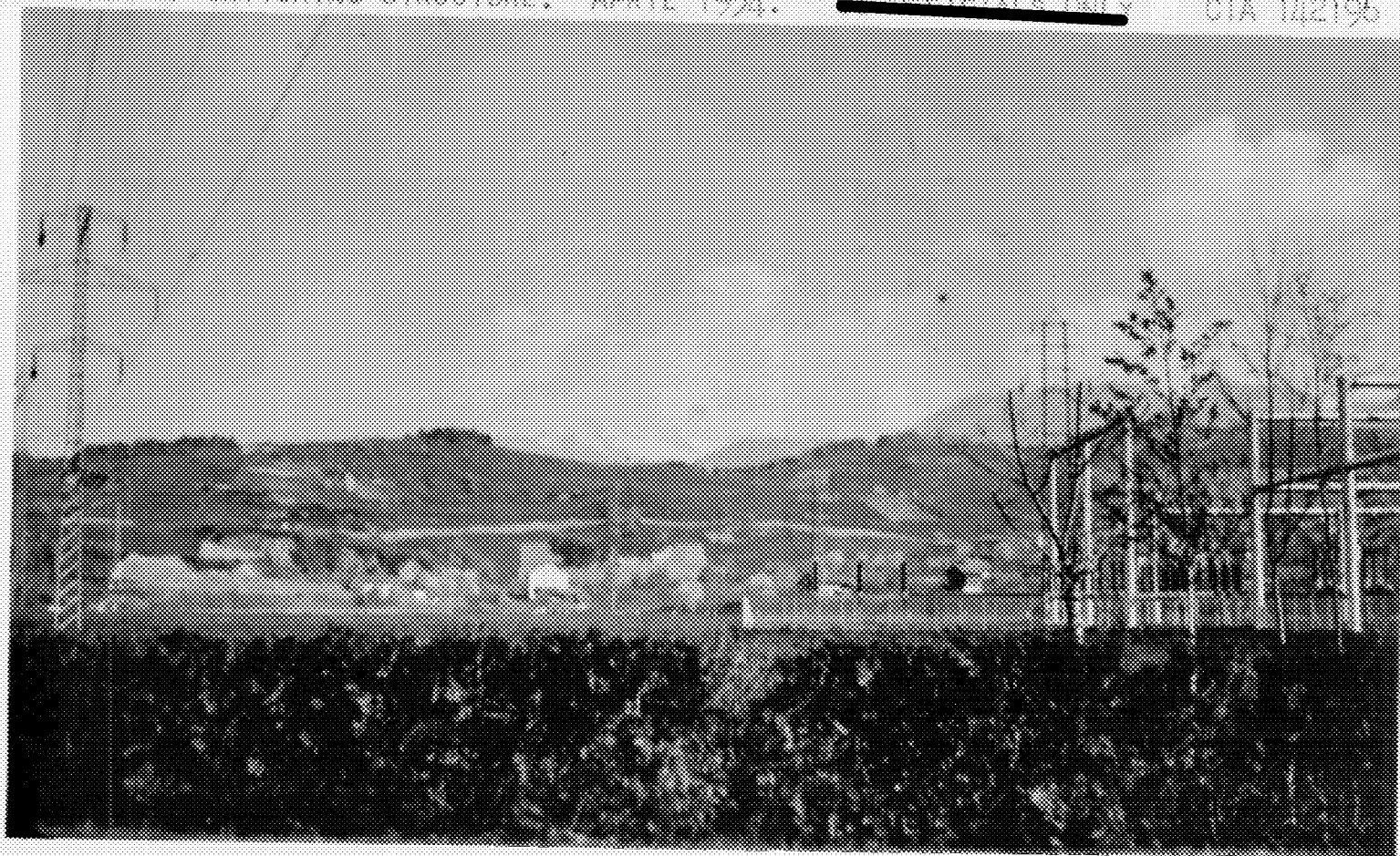
SWITZERLAND VALAIS ST. MAURICE (NR) 46 13 N 07 00 E
LAVEY HYDROELECTRIC POWER PLANT. APRIL 1954. ~~US CITIZENSHIP ONLY~~ CIA 142195



Lavey Hydro Plant near St. Maurice,
Switzerland, on Rhone River
City of Lausanne System
Units installed in rock cavern. Taken
~~by [redacted]~~

25X1X6

SWITZERLAND VALAIS ST. MAURICE (NR) 46 13 N 07 00 E
LAVEY HYDROELECTRIC POWER PLANT. DOUBLE CIRCUIT TRANSMISSION LINE AND SEC-
TION OF SWITCHING STRUCTURE. APRIL 1954. ~~NO OFFICIALS ONLY~~ CIA 142196

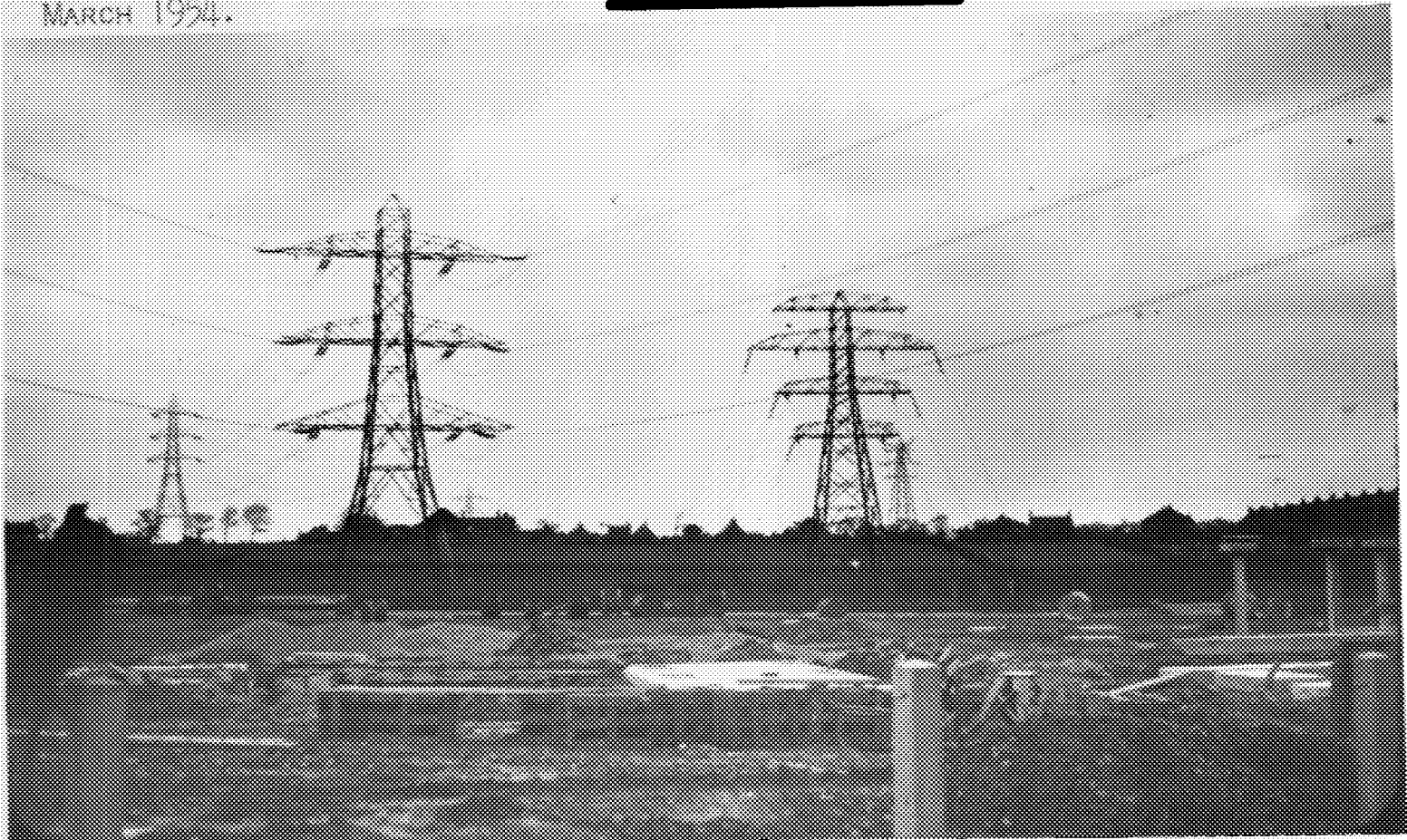


Lavey Hydro Plant near St. Maurice,
Switzerland, on Rhone River
City of Lausanne System
Double circuit transmission line and part
of switching structure. ~~NO OFFICIALS ONLY~~

25X1X6

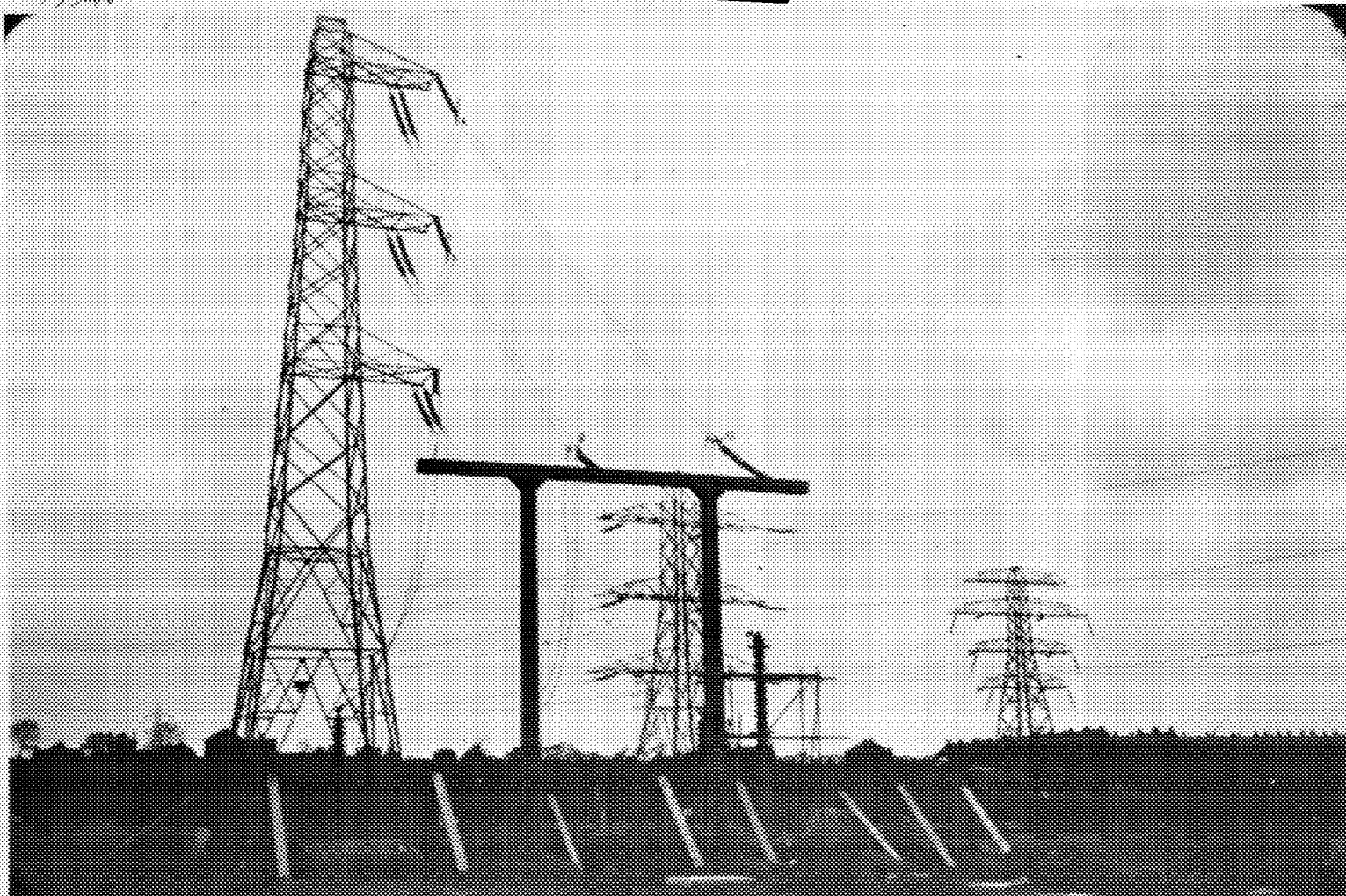
25X1X6

ENGLAND YORKSHIRE SHEFFIELD 53 22 N 01 30 W
WEST MELTON SUBSTATION. DOUBLE CIRCUIT. 275 KV TWIN CONDUCTOR LINE, LEFT.
MARCH 1954. US EYES ONLY CIA 142197



West Melton Substation (Sheffield, Eng.)
Double Circuit - 275 kv twin conductor
line on left. [REDACTED] 25X1X6

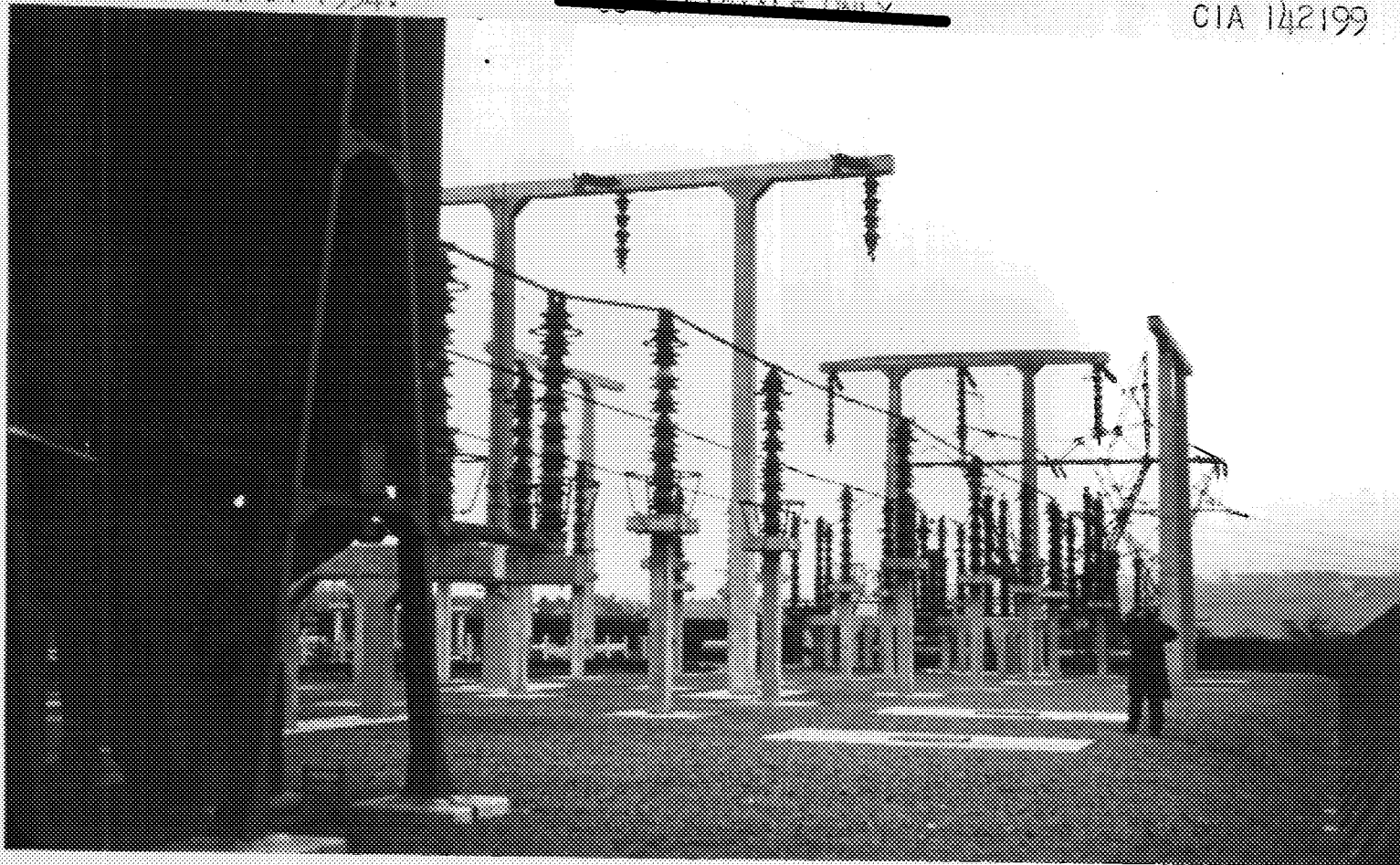
ENGLAND YORKSHIRE SHEFFIELD 53 22 N 01 30 W
WEST MELTON SUBSTATION. 275 KV TWIN CONDUCTOR LINE TO FERRY BRIDGE. MARCH
1954. ~~US EYES ONLY~~ CIA 142198



West Melton Substation (Sheffield, Eng.)
British Electricity Authority
New 275 kv Twin Conductor Line to Ferry
Bridge

Note reinforced concrete structure in
foreground. ~~US EYES ONLY~~ 25X1X6

ENGLAND YORKSHIRE SHEFFIELD 53 22 N 01 30 W
WEST MELTON SUBSTATION. 275 KV BUSSES. AIRBLAST CIRCUIT BREAKER, BACK-
GROUND. MARCH 1954. ~~US EYES ONLY~~ CIA 142199



West Melton Substation (Sheffield, Eng.)
British Electricity Authority
275 kv busses. Airblast circuit breaker
in background. [REDACTED]

25X1X6

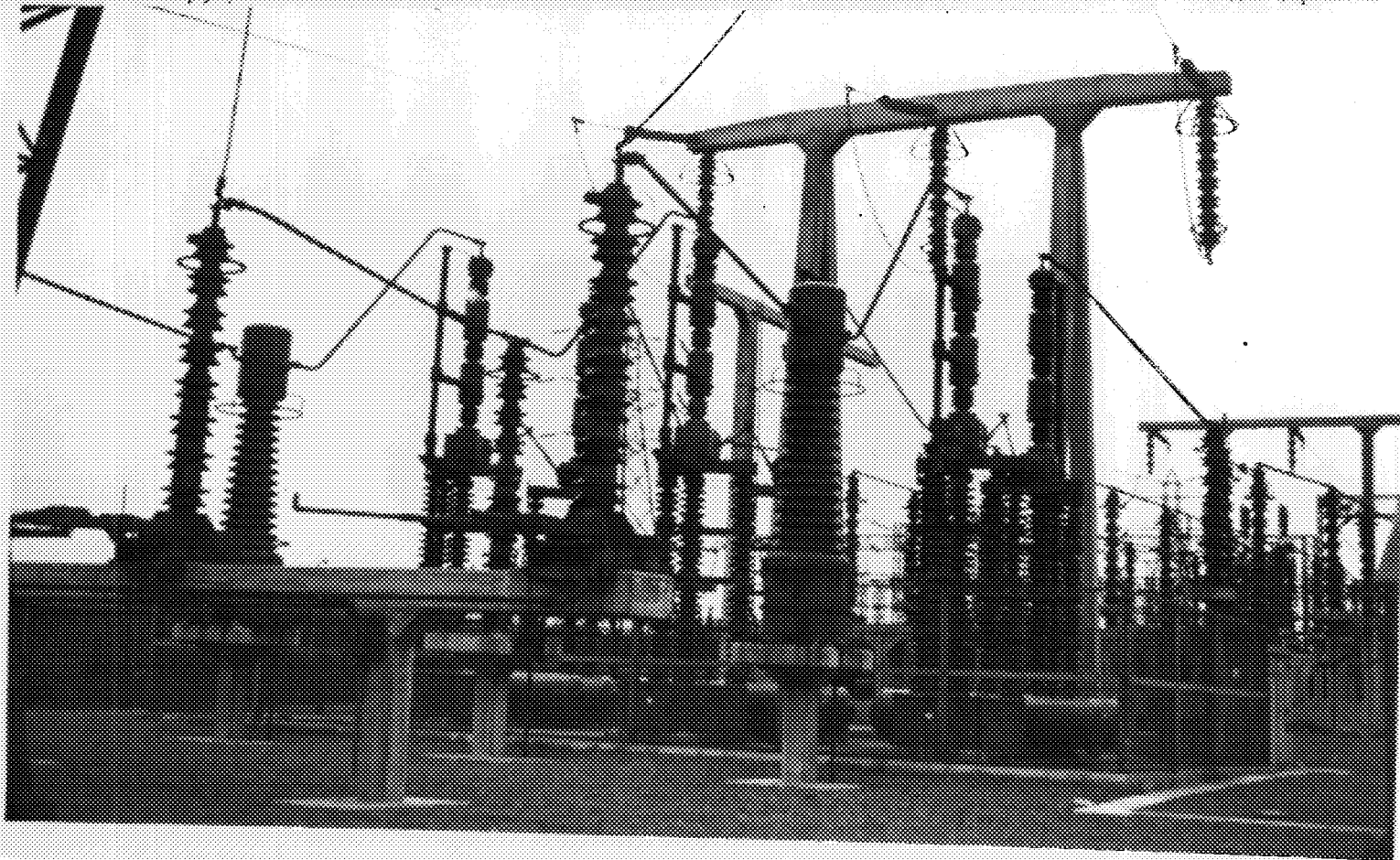
ENGLAND YORKSHIRE SHEFFIELD 53 22 N 01 30 W

WEST MELTON SUBSTATION. 275 KV SWITCHGEAR - AIR BLAST CIRCUIT BREAKER.

MARCH 1954.

~~SECRET~~

CIA 142200



West Melton Substation (Sheffield, Eng.)
275 kv switchgear - air blast circuit
breaker.

Note use of reinforced concrete structures
in place of steel. ~~SECRET~~

25X1X6

<div style="text-align: center;"> <div>RESTRICTED</div> <div>CONFIDENTIAL</div> </div>		
ROUTING AND CONTROL RECORD		
DO NOT DETACH FROM 'ON LOAN' DOCUMENTS		
<u>6 October 1954</u> <small>DATE</small>		
TO: GRAPHICS REGISTER		
ATTN:		
BUILDING	ROOM NO.	
TITLE		
13 Black and White Photographs		
and [REDACTED] 25X1A2g		
[REDACTED] 25X1A2g		
REMARKS		
<div style="display: flex; justify-content: space-between;"> <div> <input checked="" type="checkbox"/> RETAIN </div> <div> <input type="checkbox"/> ON LOAN </div> </div>		
DOCUMENT(S)	DOCUMENT(S) MUST BE RETURNED TO	
FOR RETENSION	[REDACTED]	
BY ADDRESSEE	BY (DEADLINE)	
FROM:		
[REDACTED] BRANCH		
BUILDING	ROOM NO.	EXTENSION
Quarters Eye	1808	2576

25X1A8a

25X1A9a

25X1A8a